



Application No.: 10/588,052

Supplemental Response Dated: March 6, 2008  
Replacement Sheet

tg ttg ctg atc aac ttt ttc atc gct gtt ctg gga gtg ata tca ctg 48  
Met Leu Leu Ile Asn Phe Phe Ile Ala Val Leu Gly Val Ile Ser Leu  
1 5 10 15

tct cct att gtg gtt gct cgt tat att ctt cga cga gat tgc act aca 96  
Ser Pro Ile Val Val Ala Arg Tyr Ile Leu Arg Arg Asp Cys Thr Thr  
20 25 30

gtt acg gtc ttg tcc tcc cct gag tct gtg acg agt tcg aac cat gtt 144  
Val Thr Val Leu Ser Ser Pro Glu Ser Val Thr Ser Ser Asn His Val  
35 40 45

cag cta gcc agt cat gag atg tgc gac agt acc ttg tca gcg tcc ctt 192  
Gln Leu Ala Ser His Glu Met Cys Asp Ser Thr Leu Ser Ala Ser Leu  
50 55 60

tat atc tac aat gat gat tat gat aag att gtg aca ctt tat tat ctt 240  
Tyr Ile Tyr Asn Asp Asp Tyr Asp Lys Ile Val Thr Leu Tyr Tyr Leu  
65 70 75 80

aca tcg tcg ggc aca act ggg tcc gta aca gcg tct tat tct tct agt 288  
Thr Ser Ser Gly Thr Thr Gly Ser Val Thr Ala Ser Tyr Ser Ser Ser  
85 90 95

ttg agt aac aac tgg gaa ttg tgg tct ctc tcg gct ccg gct gca gat 336  
Leu Ser Asn Asn Trp Glu Leu Trp Ser Leu Ser Ala Pro Ala Ala Asp  
100 105 110

gct gtc gag atc act gga gct agt tat gta gac agc gat gca tct gcg 384  
Ala Val Glu Ile Thr Gly Ala Ser Tyr Val Asp Ser Asp Ala Ser Ala  
115 120 125

aca tac gcc acg tct ttt gat ata cct ctt act acc acg aca acg tcg 432  
Thr Tyr Ala Thr Ser Phe Asp Ile Pro Leu Thr Thr Thr Thr Ser  
130 135 140

tcg tct tct gct agt gcg act tca aca tct agt cta acc aca aca tct 480  
Ser Ser Ser Ala Ser Ala Thr Ser Thr Ser Ser Leu Thr Thr Thr Ser  
145 150 155 160

agt gtt tcc att tcg gtg tcc gtc cct aca gga aca gct gca aat tgg 528  
Ser Val Ser Ile Ser Val Ser Val Pro Thr Gly Thr Ala Ala Asn Trp  
165 170 175

cga ggt agg gct atc tat cag atc gtg act gat aga ttt gca cgc act 576  
Arg Gly Arg Ala Ile Tyr Gln Ile Val Thr Asp Arg Phe Ala Arg Thr  
180 185 190

FIG. 1a

gac ggc tcc acc aca tat tta tgc gat gtt acc gat agg gtc tat tgc	624
Asp Gly Ser Thr Thr Tyr Leu Cys Asp Val Thr Asp Arg Val Tyr Cys	
195	200
205	
gga ggg tct tat cag ggg att atc aat atg ctg gat tac atc caa ggc	672
Gly Gly Ser Tyr Gln Gly Ile Ile Asn Met Leu Asp Tyr Ile Gln Gly	
210	215
220	
atg ggc ttt act gct att tgg att tct cct ata gtg gaa aat att ccc	720
Met Gly Phe Thr Ala Ile Trp Ile Ser Pro Ile Val Glu Asn Ile Pro	
225	230
235	240
gat gac acc gga tac ggt tac gca tat cat ggt tat tgg atg aaa gat	768
Asp Asp Thr Gly Tyr Gly Tyr Ala Tyr His Gly Tyr Trp Met Lys Asp	
245	250
255	
atc ttc gcc ctg aat aca aat ttt ggt act gca gac gat ttg ata gcg	816
Ile Phe Ala Leu Asn Thr Asn Phe Gly Thr Ala Asp Asp Leu Ile Ala	
260	265
270	
ttg gct acg gaa ttg cat aat cgc ggc atg tac ttg atg gtt gat att	864
Leu Ala Thr Glu Leu His Asn Arg Gly Met Tyr Leu Met Val Asp <u>Ile</u>	
275	280
285	
gtt gtc aat cac ttt gct ttc tca gga agt cat gcc gac gtg gac tac	912
<u>Val Val Asn His</u> Phe Ala Phe Ser Gly Ser His Ala Asp Val Asp Tyr	
290	295
300	
tct gaa tat ttc ccg tat tcg tcc cag gat tat ttt cat tca ttt tgc	960
Ser Glu Tyr Phe Pro Tyr Ser Ser Gln Asp Tyr Phe His Ser Phe Cys	
305	310
315	320
tgg att aca gat tac tcg aat cag aca aac gtt gag cag tgc tgg ctt	1008
Trp Ile Thr Asp Tyr Ser Asn Gln Thr Asn Val Glu Gln Cys Trp Leu	
325	330
335	
ggc gac gat act gtt cct ctc gtg gac gtc aat acc caa ctt gac acc	1056
Gly Asp Asp Thr Val Pro Leu Val Asp Val Asn Thr Gln Leu Asp Thr	
340	345
350	
gtg aaa agt gaa tat caa tcc tgg gtt caa gaa ctt ata gct aat tac	1104
Val Lys Ser Glu Tyr Gln Ser Trp Val Gln Glu Leu Ile Ala Asn Tyr	
355	360
365	
tct att gac ggc cta aga att gac acc gtc aag cac gtg cag atg gat	1152
Ser Ile Asp Gly <u>Leu Arg Ile Asp Thr Val Lys His</u> Val Gln Met Asp	
370	375
380	

FIG. 1b

ttt tgg gca cca ttt caa gag gct gca ggg att tac gcc gtt ggt gaa 1200  
 Phe Trp Ala Pro Phe Gln Glu Ala Ala Gly Ile Tyr Ala Val Gly Glu  
 385 390 395 400

gta ttc gac ggt gat cca tcc tac aca tgt cca tat cag gaa aat ctt 1248  
 Val Phe Asp Gly Asp Pro Ser Tyr Thr Cys Pro Tyr Gln Glu Asn Leu  
 405 410 415

gac ggt gtc ttg aat tat cct gtt tat tat cct gtc gtc tct gcg ttt 1296  
 Asp Gly Val Leu Asn Tyr Pro Val Tyr Tyr Pro Val Val Ser Ala Phe  
 420 425 430

gag agt gtt agt ggg tcg gtc tcc tcg tta gtc gat atg att gat acg 1344  
 Glu Ser Val Ser Gly Ser Val Ser Leu Val Asp Met Ile Asp Thr  
 435 440 445

ctc aag tct gaa tgc acc gac act act ctc cta ggc tcc ttt cta gag 1392  
 Leu Lys Ser Glu Cys Thr Asp Thr Thr Leu Leu Gly Ser Phe Leu Glu  
 450 455 460

aat caa gat aat ccg cga ttc cct agc tac act tct gat gag tct tta 1440  
Asn Gln Asp Asn Pro Arg Phe Pro Ser Tyr Thr Ser Asp Glu Ser Leu  
 465 470 475 480

att aaa aat gcg atc gct ttc act atg ctc tca gac ggc att ccc ata 1488  
 Ile Lys Asn Ala Ile Ala Phe Thr Met Leu Ser Asp Gly Ile Pro Ile  
 485 490 495

att tat tac ggt cag gag caa ggc ctc aat ggt gga aac gat ccc tat 1536  
 Ile Tyr Tyr Gly Gln Glu Gln Gly Leu Asn Gly Gly Asn Asp Pro Tyr  
 500 505 510

aat cga gag gcg ctt tgg ctt acg ggc tac tcc aca acg tcg acg ttc 1584  
 Asn Arg Glu Ala Leu Trp Leu Thr Gly Tyr Ser Thr Thr Ser Thr Phe  
 515 520 525

tac aaa tac att gcg tcg ttg aat cag att aga aat cag gct ata tac 1632  
 Tyr Lys Tyr Ile Ala Ser Leu Asn Gln Ile Arg Asn Gln Ala Ile Tyr  
 530 535 540

aaa gat gat act tat ctc aca tat cag aac tgg gtt att tat tcg gat 1680  
 Lys Asp Asp Thr Tyr Leu Thr Tyr Gln Asn Trp Val Ile Tyr Ser Asp  
 545 550 555 560

tcc acg aca ata gca atg cgg aaa ggt ttt aca ggg aac caa ata att 1728  
 Ser Thr Thr Ile Ala Met Arg Lys Gly Phe Thr Gly Asn Gln Ile Ile  
 565 570 575

FIG. 1c

acg gtt ctg tca aat ctt ggg acc agt ggc act tcg tac act ttg acg 1776  
Thr Val Leu Ser Asn Leu Gly Thr Ser Gly Ser Ser Tyr Thr Leu Thr  
580 585 590

ctt tcg aat acg gga tat acc gca tct agc gtt gta tat gag atc ttg 1824  
Leu Ser Asn Thr Gly Tyr Thr Ala Ser Ser Val Val Tyr Glu Ile Leu  
595 600 605

aca tgc aca gct gtg act gtg gat tcg tct ggg aat ttg gca gtg ccg 1872  
Thr Cys Thr Ala Val Thr Val Asp Ser Ser Gly Asn Leu Ala Val Pro  
610 615 620

atg tcc agt ggc cta cca aaa gtc ttt tat cag gaa tcg caa ctg gtt 1920  
Met Ser Ser Gly Leu Pro Lys Val Phe Tyr Gln Glu Ser Gln Leu Val  
625 630 635 640

ggc tct gga atc tgc tcc atg tagag 1946  
Gly Ser Gly Ile Cys Ser Met  
645

FIG. 1d